



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/537,716	03/21/2006	Shingo Tamai	SOHSH20.001APC	5146
20995	7590	12/18/2007	EXAMINER	
KNOBBE MARTENS OLSON & BEAR LLP 2040 MAIN STREET FOURTEENTH FLOOR IRVINE, CA 92614			TON, TRI T	
		ART UNIT	PAPER NUMBER	
		2877		
		NOTIFICATION DATE	DELIVERY MODE	
		12/18/2007	ELECTRONIC	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

jcartee@kmob.com
eOAPilot@kmob.com

Office Action Summary	Application No.	Applicant(s)	
	10/537,716	TAMAI, SHINGO	
Examiner	Art Unit		
Tri T. Ton	2877		

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 21 March 2006.

2a) This action is **FINAL**. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-16 is/are pending in the application.
4a) Of the above claim(s) 15 and 16 is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 1-4,6-8 and 10-14 is/are rejected.

7) Claim(s) 5 and 9 is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on 03 June 2005 is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413)
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) Paper No(s)/Mail Date. ____.
3) Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 06/03/05. 5) Notice of Informal Patent Application
6) Other: _____

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of Group I, Claims 1-14 in the reply filed on 11/13/2007 is acknowledged.
2. Claims 15-16 withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected Group II, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 11/13/2007.

Priority

3. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

4. The information disclosure statement filed 06/03/05 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each cited foreign patent document; each non-patent literature publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered.

Oath/Declaration

5. The Oath and Declaration filed on 03/21/2006 is acceptable.

Specification

6. The examiner respectfully suggests that the Applicant carefully review the specification for idiomatic and grammatical errors, which may have been inadvertently overlooked. The disclosure is objected to because of the following informalities:

There are minor typographical errors throughout. For example:

Specification, page 9, line 11, "light source 2" should be "light source 3".

Specification, page 11, line 10, "arrow A2" should be in the drawings.

Specification, page 11, lines 22-23; "mounting surface 50a" should be in the drawings.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 7, 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shimura Masayuki (Japanese Publication No. 06-310696). Hereafter, "Shimura".

Regarding Claim 1, Shimura teaches an optical module arranged facing a light receiving surface of said solid-state imaging device (figure 1, elements 30, 32, 34, 36, 50) and used for

irradiating a test light for said light receiving surface (figure 1, element 46) at testing photoelectric converting property (figure 1, elements 40, 42, 44) of said solid-state imaging device (figure 1, element 38).

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 1, 2, 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shimura Masayuki (Japanese Publication No. 06-310696) in view of Li (U.S. Patent No. 6,759,662). Hereafter, “Shimura”, and “Li”.

Regarding Claim 1, Shimura teaches an optical lens (paragraph [0006], lines 8-10, [0014], line 6); a diffusion plate adjusting an intensity distribution of a light passed through said optical lens (figure 1, element 32); a pinhole passing said light from said diffusion plate (figure 1, element 52).

However, Shimura does not teach a light blocking portion preventing an outside light from entering into an optical path. Li teaches a light blocking portion preventing an outside light from entering into an optical path (abstract, lines 12-15, column 3, lines 3-5, column 7, lines 3-6). It would have been obvious to one having ordinary skill in the art at the time of the invention

was made to modify Shimura by adding light blocking portion in order to “block the scattered light”, (as stated by Li, column 7, lines 4-6).

Regarding Claim 2, Shimura teaches comprising a plurality of sets of said optical lens, said diffusion plate and said pinhole (figures 3, 4).

Regarding Claim 6, Shimura teaches diffusion plate being set near to said optical lens and apart from said pinhole (figure 1, elements 30, 32, 52), (element 30 is including the light source, the optical system and lens).

11. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shimura Masayuki (Japanese Publication No. 06-310696) in view of Li (U.S. Patent No. 6,759,662), and further in view of Stark et al. (U.S. Patent No. 5,225,884). Hereafter, “Shimura”, “Li”, and “Stark”.

Regarding Claim 3, Shimura and Li teach all the limitations of claims 1, and 2 as stated above except for light blocking means for preventing said lights output from adjacent pinholes from interfering mutually. Stark teaches light blocking means for preventing said lights output from interfering mutually (column 2, lines 46-52). It would have been obvious to one having ordinary skill in the art at the time of the invention was made to modify Shimura and Li by having light blocking means in order to “block other possible interfering light from other source”, (as stated by Stark, column 2, lines 50-52).

12. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shimura Masayuki (Japanese Publication No. 06-310696) in view of Li (U.S. Patent No. 6,759,662), and further in view of Roach (U.S. Patent No. 4,319,830). Hereafter, "Shimura", "Li", and "Roach".

Regarding Claim 4, Shimura and Li teach all the limitations of claim 1 as stated above except for diffusion plate comprising three dimensional curved surface for adjusting said intensity distribution. Roach teaches diffusion plate comprising three dimensional curved surface for adjusting said intensity distribution (figure 4, element 11a, and column 4, lines 32-38). It would have been obvious to one having ordinary skill in the art at the time of the invention was made to modify Shimura and Li by having diffusion plate comprising three dimensional curved surface for adjusting said intensity distribution in order to "provide a homogeneous mix of the light", (as stated by Roach, column 4, lines 35-36).

13. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shimura Masayuki (Japanese Publication No. 06-310696) in view of Fukazawa et al. (U.S. Publication No. 20020093647). Hereafter, "Shimura", and "Fukazawa".

Regarding Claim 8, Shimura teaches a mounting portion for mounting said optical module. This feature is considered to be inherent because it is believed that all optical modules have to be positioned or mounted on a mounting portion. In other words, the optical module cannot stand by itself and has to be mounted.

However, Shimura does not teach a means for determining positions of said mounting portion and said optical module. Fukazawa teaches a means for determining positions of the illuminating optical system (paragraph [0112]). It would have been obvious to one having

ordinary skill in the art at the time of the invention was made to modify Shimura by determining positions of said mounting portion and said optical module in order to "vary the exiting of the light", (as stated by Fukazawa, paragraph [0112], line 13).

Regarding Claim 10, Shimura teaches an opening passing said light output through said optical module and proceeding to said light receiving surface of said solid-state imaging device (figure 1, elements 52, 46, 30, 32, 36).

Regarding Claim 12, Shimura teaches an optical module outputting an entered light as a test light through a pinhole (figure 1, elements 30, 32, 34, 36, 50); a relay device transmitting necessary signals for a measurement of said photoelectric converting property of said solid-state imaging device by being connected electrically to said solid-state imaging device (figure 1, element 46, 38, 40, 42, 44); outputting said light for said solid-state imaging device at a state that said relay device is connected electrically with said solid-state imaging device (figure 1, elements 38, 40, 42, 44).

However, Shimura does not teach means for moving and determining position. Fukazawa teaches means for moving and determining position of the illuminating optical system (paragraph [0112]). It would have been obvious to one having ordinary skill in the art at the time of the invention was made to modify Shimura by moving and determining positions in order to "vary the exiting of the light", (as stated by Fukazawa, paragraph [0112], line 13).

Regarding Claim 13, Shimura teaches said relay device comprising an opening portion for making said optical module faces a light receiving surface of said solid-state imaging device (figure 1, element 52), irradiating for said light receiving surface of said solid-state imaging device through said opening portion (paragraph [0013]).

However, Shimura does not teach means for determining position of said optical module. Fukazawa teaches means for determining position of the illuminating optical system (paragraph [0112]). It would have been obvious to one having ordinary skill in the art at the time of the invention was made to modify Shimura by determining positions in order to “vary the exiting of the light”, (as stated by Fukazawa, paragraph [0112], line 13).

14. Claims 11, 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shimura Masayuki (Japanese Publication No. 06-310696) in view of Fukazawa et al. (U.S. Publication No. 20020093647), and further in view of Li (U.S. Patent No. 6,759,662). Hereafter, “Shimura”, “Li”, and “Fukazawa”.

Regarding Claims 11, and 14, Shimura teaches an optical lens (paragraph [0006], lines 8-10, [0014], line 6); a diffusion plate adjusting an intensity distribution of a light passed through said optical lens (figure 1, element 32); a pinhole passing said light from said diffusion plate (figure 1, element 52).

However, Shimura and Fukazawa do not teach a light blocking portion preventing an outside light from entering into an optical path. Li teaches a light blocking portion preventing an outside light from entering into an optical path (abstract, lines 12-15, column 3, lines 3-5, column 7, lines 3-6). It would have been obvious to one having ordinary skill in the art at the

time of the invention was made to modify Shimura and Fukazawa by adding light blocking portion in order to "block the scattered light", (as stated by Li, column 7, lines 4-6).

Allowable Subject Matter

15. Claims 5 and 9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
16. The following is a statement of reasons for the indication of allowable subject matter: there was no prior art found by the examiner that suggested modification or combination with the cited art so as to satisfy the combination of all the limitations in claims 5 and 9.
17. As claim 5, the prior art of record taken alone or in combination, fails to disclose or render obvious "common diffusion plate for equalizing incident angles of lights entering into a plurality of said optical lenses" in combination with the rest of the limitations of claims 1, 2, and 5.
18. As claim 5, the prior art of record taken alone or in combination, fails to disclose or render obvious "determination pin and a position determination hole to be fit and inserted by said position determination pin" in combination with the rest of the limitations of claims 7, 8, and 9.

Conclusion

19. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The references of Shimura Masayuki (Japanese Publication No. 06-310696), Li (U.S.

Patent No. 6,759,662), Stark et al. (U.S. Patent No. 5,225,884), Roach (U.S. Patent No. 4,319,830), and Fukazawa et al. (U.S. Publication No. 2002/0093647) teach of various features similar to the claimed invention.

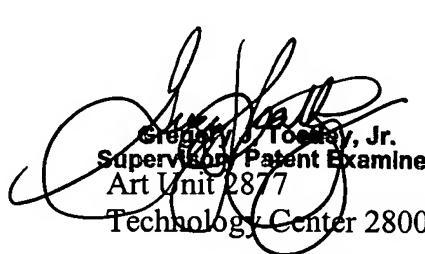
Fax/Telephone Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tri T. Ton whose telephone number is (571) 272-9064. The examiner can normally be reached on 10:30am - 7:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory J. Toatley, Jr. can be reached on (571) 272-2059. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


December 7, 2007
Examiner Tri Ton/SN


Gregory J. Toatley, Jr.
Supervisory Patent Examiner
Art Unit 2877
Technology Center 2800

10 Dec 07